Hearing Loss Prevention Program

WAC 296-817-200

Summary

YOUR RESPONSIBILITY:

To prevent employee hearing loss by minimizing, and providing protection from, noise exposures

You must

-Continued-

Hearing Loss Prevention Program

WAC 296-817-200

Summary

WAC 296-817-200 (Continued)

WAC 296-817-20005

Conduct employee noise exposure monitoring

You must

- Conduct employee noise exposure monitoring to determine the employee's actual exposure when reasonable information indicates that any employee's exposure may equal or exceed 85 dBA TWA_8.

Note:

- Representative monitoring may be used where several employees perform the same tasks in substantially similar conditions
- Examples of information or situations that can indicate exposures which equal or exceed 85 dBA TWA_8, include:
  - Noise in the workplace that interferes with people speaking, even at close range
  - Information from the manufacturer of equipment you use in the workplace that indicates high noise levels for machines in use
  - Reports from employees of ringing in their ears or temporary hearing loss
  - Warning signals or alarms that are difficult to hear
  - Work near abrasive blasting or jack hammering operations
  - Use of tools and equipment such as the following:
    - Heavy equipment or machinery
    - Fuel-powered hand tools
    - Compressed air-driven tools or equipment in frequent use
    - Power saws, grinders or chippers
    - Powder-actuated tools.

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Hearing Loss Prevention Program

WAC 296-817-200

Rule

WAC 296-817-20005 (Continued)

You must

- Follow applicable guidance in WAC 296-817-300 when conducting noise exposure monitoring
- Make sure your sampling for noise exposure monitoring identifies:
  - All employees whose exposure equals or exceeds the following:
    - 85 dBA TWA_8 (noise dosimetry, providing an average exposure over an 8-hour time period
    - 115 dBA (slow response sound level meter, identifying short-term noise exposures)
    - 140 dBC (fast response sound level meter, identifying almost instantaneous noise exposures).
  - Exposure levels for selection of hearing protection.
- Provide exposed employees and their representatives with an opportunity to observe any measurements of employee noise exposure that are conducted
- Notify each employee whose exposure equals or exceeds 85 dBA TWA_8 of the monitoring results within 5 working days of when you receive the results
- Conduct additional noise monitoring whenever a change in production, process, equipment or controls, may reasonably be expected to result in:
  - Additional employees whose exposure equals or exceeds 85 dBA TWA_8
  - Employees exposed to higher level of noise requiring more effective hearing protection

Note:

Conditions that may be expected to increase exposure include:

- Adding machinery to the work area
- Increasing production rates
- Removal or deterioration of noise control devices
- Increased use of noisy equipment
- Change in work schedule
- Change of job duties.

WAC 296-817-20010

Control employee noise exposures that equal or exceed 90 dBA TWA_8

Important:

Hearing protection provides a barrier to noise and protects employees but isn't considered a control of the noise hazard. Separate requirements apply to hearing protection and are found in WAC 296-817-20015.

You must

- Reduce employee noise exposure, using feasible controls, wherever exposure equals or exceeds 90 dBA TWA_8.

Note:

- Once noise exposures are brought below 90 dBA TWA_8, no further reduction is required. However, further reduction of noise may reduce the need for other hearing loss prevention requirements
- Controls that eliminate noise at the source or establish a permanent barrier to noise are typically more reliable. For example:
  - Replacing noisy equipment with quiet equipment
  - Using silencers and mufflers
  - Installing enclosures
  - Damping noisy equipment and parts.
- Other controls and work practices may also be useful for reducing noise exposures. Examples include:
  - Employee rotation
  - Limiting use of noisy equipment
  - Rescheduling work.

Hearing Loss Prevention Program

WAC 296-817-200

Rule

WAC 296-817-20015

Make sure employees use hearing protection when their noise exposure equals or exceeds 85 dBA TWA_8

You must

- Make sure employees wear hearing protectors that will provide sufficient protection when exposure equals or exceeds:
  - 85 dBA TWA_8 (noise dosimetry, providing an average exposure over an 8-hour time period)
  - 115 dBA (slow response sound level meter, identifying short-term noise exposures)
  - 140 dBC (fast response sound level meter, identifying almost instantaneous noise exposures).
- Provide employees with an appropriate selection of hearing protectors:
  - The selection must include at least two distinct types (such as molded earplugs, foam earplugs, custom-molded earplugs, earcaps, or earmuffs) for each exposed employee and must be sufficient to cover:
    - Different levels of hearing protection needed in order to reduce all employee exposures to a level below 85 dBA TWA_8
    - Different sizes
    - Different working conditions.
  - Consider requests of the employees regarding:
    - Physical comfort
    - Environmental conditions
    - Medical needs
    - Communication requirements.

Note:

Hearing protector selection should include earplugs, earcaps and earmuffs.

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WAC 296-817-20015 (Continued)

You must

- Provide hearing protection at no cost to employees
- Supervise employees to make sure that hearing protection is used correctly
- Make sure hearing protectors are:
  - Properly chosen for fit
  - Replaced as necessary.
- Make sure all hearing protection is sufficient to reduce the employee's equivalent 8-hour noise exposure to 85 dBA or less. When using the A-weighted exposure measurements, reported as "dBA TWA_8," the reduction in noise exposure by hearing protectors is given by Table 2:

Table 2

Effective Protection of Hearing Protectors

Type of hearing protection	***Effective protection***
Single hearing protection (earplugs, earcaps or earmuffs)	7 dB less than the manufacturer assigned noise reduction rating (NRR); for example, earplugs with an NRR of 20 dB are considered to reduce employee exposures of 95 dBA TWA_8 to 82 dBA TWA_8
Dual hearing protection (earplug and earmuff worn together)	2dB less than the higher NRR of the two protectors; for example, earplugs with an NRR of 20 dB and earmuffs with an NRR of 12 dB are considered to reduce employee exposures of 100 dBA TWA_8 to 82 dBA TWA_8

- In addition to protection based on daily noise dose, make sure hearing protection has an NRR of at least 20 dB when exposures involve noise that equals or exceeds 115 dBA (slow response sound level meter) or 140 dBC (fast response sound level meter).

Helpful Tool:

Hearing Protection-Additional Information
You can find additional hearing protection information in the Resources section of this chapter.

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Hearing Loss Prevention Program

WAC 296-817-200

Rule

WAC 296-817-20015 (Continued)

Note:

You may also evaluate hearing protection by using the other methods given in the NIOSH *Compendium of Hearing Protection* (NIOSH Publication No. 95-105). These methods require additional monitoring and are more complex, but provide a more thorough evaluation of protection. This may be useful in cases where communication is critical or for evaluating hearing protection for employees with hearing impairment.

WAC 296-817-20020

Make sure exposed employees receive training about noise and hearing protection

You must

- Train all employees whose noise exposure equals or exceeds 85 dBA TWA_8
- Provide training when an employee is first assigned to a position involving noise exposure that equals or exceeds 85 dBA TWA_8 **and** at least annually after that
- Update information provided in the training program to be consistent with changes in controls, hearing protectors and work processes
- Make sure your noise and hearing protection training includes:
  - The effects of noise on hearing (including both occupational and nonoccupational exposures)
  - Noise controls used in your workplace
  - The purpose of hearing protectors: The advantages, disadvantages, and attenuation of various types
  - Instructions about selecting, fitting, using, and caring for hearing protection

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WAC 296-817-20020 (Continued)

You must

- The purpose and procedures for program evaluation including audiometric testing and hearing protection auditing when you choose to rely upon auditing (see WAC 296-817-500)
- The employees' right to access records kept by the employer.

- Maintain a written program describing initial and refresher training.

WAC 296-817-20025

Make sure warning signs are posted for areas where noise levels equal or exceed 115 dBA

You must

- Make sure warning signs are posted at the entrances or boundaries of all well-defined work areas where employees may be exposed to noise that equals or exceeds 115 dBA (measured using a sound level meter with slow response).
  - Warning signs must clearly indicate that the area is a high noise area and that hearing protectors are required.

WAC 296-817-20030

Arrange for oversight of audiometric testing

You must

- Make sure audiometric testing as described by WAC 296-817-400 is supervised and reviewed by one of the following licensed or certified individuals:
  - An audiologist
  - An otolaryngologist
  - Another qualified physician.
- Make sure audiograms are conducted by one of the above individuals or by a technician certified by the Council of Accreditation in Occupational Hearing Conservation (CAOHC) and responsible to a qualified reviewer.

Hearing Loss Prevention Program

WAC 296-817-200

Rule

WAC 296-817-20035

Identify and correct deficiencies in your hearing loss prevention program

You must

- Use audiometric testing to identify hearing loss, which may indicate program deficiencies
- Take appropriate actions when deficiencies are found with your program.
  - A deficiency may be indicated when:
    - Any employee experiences measurable hearing loss indicated by a standard threshold shift

      OR

    - Any employee is not wearing appropriate hearing protection during an audit when auditing is used in place of baseline audiograms for short term employees (see WAC 296-817-500, Options to Audiometric Testing).

Note:

- A standard threshold shift or audit deficiency doesn't necessarily indicate that a significant hearing loss has occurred. These criteria are intended to help identify where there may be flaws in your hearing loss prevention program that can be fixed before permanent hearing loss occurs.
- There are additional statistical tools and tests that may be used to improve the effectiveness of your program. Staff conducting audiometric testing and auditing may be able to suggest additional ways to improve your hearing loss prevention program and tailor it to your worksite.

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WAC 296-817-20035 (Continued)

You must

- Evaluate the following, at a minimum, when responding to a standard threshold shift:
  - Employee noise exposure measurements
  - Noise controls in the work area
  - The selection of hearing protection available and refit employees as necessary
  - Employee training on noise and the use of hearing protection and conduct additional training as necessary.

Reference:

You may use the option of auditing hearing protection (see WAC 296-817-500) for employees hired or transferred to jobs with noise exposure for less than one year. You may also use audiograms provided by a third-party hearing loss prevention program in some circumstances. Details of these program options are found in WAC 296-817-500, Options to Audiometric Testing.

Helpful Tool:

Eliminating Noise

You can find information on eliminating noise exposure in the Resources section of this chapter.

Hearing Loss Prevention Program

WAC 296-817-200

Rule

WAC 296-817-20040

Document your hearing loss prevention activities

You must

- Create and retain records documenting noise exposures. Include, at a minimum:
  - Exposure measurements required by this chapter for at least 2 years and for as long as you rely upon them to determine employee exposure
  - Audiometric test records for the duration of employment for the affected employees
  - Hearing protection audits, if you choose to rely upon them, for the duration of employment of the affected employees.

Note:

- You need to keep as complete a record as possible. Records developed under previous rules or in other jurisdictions need to be kept, even when they don't fulfill the full requirements of this chapter. Similarly, records found to have errors in collection or processing need to be kept if they provide an indication of employee exposure or medical condition not found in other records
- You may want to consider your other business needs, such as worker's compensation claims management, before discarding these records.

Reference:

You need to follow additional requirements for records considered employee exposure or medical records. See chapter 296-62 WAC, Part B, Access to Records for requirements for access to records, employee rights, and transfer of records.